Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A duplex automatic document feeder comprising:

a document stacking tray for stacking a set of documents;

a document separating/feeding unit having a document feeding port for separating the set of documents and feeding the documents one by one from the uppermost document thereof;

an image reading unit for reading the image data on the first side of the document passing the image reading position;

a document inverting unit for inverting the document feeding direction to read the image data on the second side of the document which passes the image reading position after the reading of the first side has been completed;

a document discharging unit for piling up the documents on the document-discharging tray after the front and the reverse side of the document of which both-sides have been read is reversed, with the document not passing on the image reading position;

a first transporting path for guiding the document from the document separating/feeding unit to the image reading position and having a document set sensor near the document feeding port in the first transporting path ;

a second transporting path for guiding the document from the said image reading position to the document inverting unit;

a third transporting path for guiding the document from the said document inverting unit to ~~the~~ a first intersecting point of the first transporting path and

from this first intersecting point to the said image reading position, wherein a first position detecting sensor is located near the first intersecting point;

a fourth transporting path for guiding the document from ~~the~~ a second intersecting point in the midst of the said third transporting path to the said document discharging unit, wherein a second position detecting sensor is located near the second intersecting point; and

a switching member employed in the said second intersecting point which switches the document feeding path from the said document inverting unit to the third transporting path or the fourth transporting path from this intersecting point.

2. (Original) The duplex automatic document feeder according to claim 1 employs the said intersecting point between the document edge position which becomes the upper end when the feeding direction is reversed toward the scanning unit again after the reading of the first side is completed and the document edge position which becomes the upper end when the feeding direction is reversed toward the discharging unit after the reading of the second side of the document is completed.

3. (Original) The duplex automatic document feeder according to claim 2 wherein the flexible switching member is impelled at the said intersecting point for feeding the document to the fourth transporting path.

4. (Currently amended) The duplex automatic document feeder according to claim 1 wherein the said document inverting unit and the said document discharging unit are comprised of not more than three rollers neighboring one another.

5. (Original) The duplex automatic document feeder according to claim 2 further including a resist member to correct the skew of the document in the downstream position of the said intersecting point.

6. (New) The duplex automatic document feeder according to claim 3, wherein the flexible switching member is a film.

7. (New) The duplex automatic document feeder according to claim 3, wherein the flexible switching member is recovered by elastic recovering force.

8. (New) The duplex automatic document feeder according to claim 3, wherein the flexible switching member is recovered by empty weight.

9. (New) The duplex automatic document feeder according to claim 4, wherein axes of the three rollers are aligned when viewed from the side.

10. (New) The duplex automatic document feeder according to claim 4, wherein the three rollers are rotatable in either direction.

11. (New) The duplex automatic document feeder according to claim 4, wherein the three rollers include an extra roller and a first pressure roller, and wherein the extra roller and the first pressure roller are separated by a distance.